

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings of claims in the application:

### **Listing of Claims:**

Claim 1. (Previously Presented): A method comprising the steps of:

- (a) adding sulfur, or another halogenation suppressant, or mixtures thereof to a composition containing dioxin precursors,
- (b) incinerating the composition containing dioxin precursors, thereby forming a gaseous medium,
- (c) reducing heat in the gaseous medium formed in step (b),
- (d) removing ash from the gaseous medium,
- (e) adding an adsorbent to the gaseous medium formed in step (d), and
- (f) removing acid gases and particulates from the gaseous medium formed in step (e).

Claim 2. (Original): The method of Claim 1, wherein the dioxin precursors are aromatic compounds selected from the group consisting of phenols, benzene, and chlorinated aromatic compounds.

Claim 3. (Original): The method of Claim 1, wherein the composition containing dioxin precursors comprises a sludge.

Claim 4. (Previously Presented): The method of Claim 1, wherein the composition containing dioxin precursors comprises at least one selected from the group consisting of (i) a wastewater treatment sludge (ii) solid organic residues and (iii) a mixture of chlorinated solvents.

Claim 5. (Original): The method of Claim 1, wherein the adsorbent comprises powdered activated carbon.

Claim 6. (Original): The method of Claim 1, wherein the composition containing dioxin precursors is incinerated at a temperature that is at least about 800°C.

Claim 7. (Original): The method of Claim 1, wherein the composition containing dioxin precursors is incinerated in a fluidized bed incinerator.

Claim 8. (Original): The method of Claim 1, wherein the gaseous medium is selected from the group consisting of gases, particulates, and liquid droplets.

Claim 9. (Original): The method of Claim 1, wherein the gaseous medium formed in step (b) is reduced to a temperature that is more than 0 °C and below about 200°C.

Claim 10. (Original): The method of Claim 1, wherein the gaseous medium formed in step (b) is reduced to a temperature that is more than 0°C by adding water to the gaseous medium.

Claim 11. (Original): The method of Claim 1, wherein ash is removed from the gaseous medium with a precipitator.

Claim 12. (Original): The method of Claim 1, wherein the sulfur, or another halogenation suppressant, or mixtures thereof is added at a rate that is at least about 0.01kg, per 100 m<sup>3</sup> gaseous medium, and the powdered activated carbon is added at a rate that is at least about 0.01kg, per 100 m<sup>3</sup> gaseous medium.

Claim 13. (Previously Presented): The method of Claim 4, wherein the chlorinated solvents are selected from the group consisting of dichloromethane, monochlorobenzene, dichlorobenzene, 1,1-dichloroethane and methylene chloride.

Claim 14. (Currently Amended): The method of Claim 1, wherein the reduction of heat in step ~~[(b)]~~ (c) comprises passing hot gasses from a fluidized bed incinerator through a boiler for heat recovery.

**Claim 15. (Previously Presented):** A method comprising the steps of:

- (a) adding sulfur, or another halogenation suppressant, or mixtures thereof to a composition containing dioxin precursors that comprises at least one selected from the group consisting of (i) a wastewater treatment sludge (ii) solid organic residues and (iii) a mixture of halogenated solvents,
- (b) incinerating the composition containing dioxin precursors at a temperature that is at least about 800°C, thereby forming a gaseous medium,
- (c) reducing heat in the gaseous medium formed in step (b) to a temperature that is below about 200°C,
- (d) removing ash from the gaseous medium,
- (e) adding activated powder to the gaseous medium formed in step (d) at a rate that is at least about 0.0007 kg, per about 100 m<sup>3</sup> of gaseous medium,
- (f) removing acid gases and particulates from the gaseous medium formed in step (e).

**Claim 16. (Original):** The method of Claim 15, wherein the dioxin precursors are aromatic compounds selected from the group consisting of phenols, benzene, and chlorinated aromatic compounds.

**Claim 17. (Original):** The method of Claim 15, wherein the composition containing dioxin precursors incinerates in a fluidized bed incinerator.

**Claim 18. (Original):** The method of Claim 15, wherein the gaseous medium is selected from the group consisting of gases, particulates, and liquid droplets.

**Claim 19. (Original):** The method of Claim 15, wherein the gaseous medium formed in step (b) is reduced to a temperature that is more than 0 °C by adding water to the gaseous medium.

**Claim 20. (Currently Amended):** The method of Claim 15, wherein the reduction of heat in step [(b)] (c) comprises passing hot gasses from a fluidized bed incinerator through a boiler for heat recovery.